

EXHIBIT B -ENGINEERING SERVICES FEE PROPOSAL FOR
County of San Louis Obispo CSA #7 Oak Shores Risk Management Study

NO.	TASK DESCRIPTION	MNS Engineers					Reimbursable Expenses		Total Labor		TASK SUBTOTALS
		Principal Engineer	Supervising Engineer	Project Engineer	Associate Engineer	GIS Analyst					
		HRS	HRS	HRS	HRS	HRS			HRS	\$	
		\$185	\$165	\$130	\$115	\$135					
1.1.	Kick-off Meeting with Staff	4	4				\$0	8	\$1,400	\$1,400	
1.2.	Determine partnering and contributing agencies and stake-holders and develop a strategy for their notification and/or participation as appropriate						0	0	\$0	\$0	
1.3.	Site meeting with key stakeholders	3	3	3			0	9	\$1,440	\$1,440	
1.4.	Additional meetings with involved agencies such as those listed in the RFP. (For purposes of this proposal assume 3 additional Meetings)	7	7	7			0	21	\$3,360	\$3,360	
1.5.	Prepare coordination meeting minutes for inclusion in final report.	2	4		4		0	10	\$1,490	\$1,490	
1.6.	Two Meetings with the County - Progress Review and final presentation.	5	5				0	10	\$1,750	\$1,750	\$9,440
Task 2.	Assess the Interceptor System from a "risk point of-view":							0	\$0	\$0	
2.1.	Using data for the 2004 study, updated information provided by the County, and existing plans develop a basic hydraulic model to use as a foundation for assessing risk associated with pipe capacities, manhole surcharges and other flow parameters under key "What if" scenarios.	2	8	24	30		0	64	\$8,260	\$8,260	
2.2.	Research system. Review existing drawing, failure incident reports, walk the system, interview operational staff to fully understand system	1	2		15		0	18	\$2,240	\$2,240	
2.3.	Using modeled scenarios and research information, Create a list of real and potential system "weaknesses", and develop a preliminary priority list based on perceived severity	1	4		15		0	20	\$2,570	\$2,570	\$13,070
Task 3.	Using modeled and research information, Create a list of real and potential system "weaknesses", and develop a preliminary priority list based on perceived severity. For each item on the list, address and discuss the following considerations:										
3.1.	Negative Financial Impacts including cost of recovery, clean-up, repairs, public relations costs, regulatory fines.	1	4				0	5	\$845	\$845	
3.2.	Operational impacts such as degree of system failure, recovery operational issues, etc	1	4				0	5	\$845	\$845	
3.3.	General environmental impacts including water quality, and impacts on flora & fauna. This section will not be comprehensive, as the environmental document will address these issues much more thoroughly.	1	4				0	5	\$845	\$845	
3.4.	Potential public and individual health impacts	1	4				0	5	\$845	\$845	
3.5.	Recreational impacts on Lake Nacimiento, and related ancillary recreational impacts on hiking, picnicking, etc.	1	4				0	5	\$845	\$845	
3.6.	Agency impacts such as demand on staff & equipment resources, staff morale, results if severe fiscal impacts occur, and impacts to agency reputation with public & regulatory agencies.	1	4				0	5	\$845	\$845	\$5,070
Task 4.	Quantify risks in terms of the impacts identified in tasks 2 & 3.	1	4				0	5	\$845	\$845	\$845
Task 5.	Provide alternatives solutions to minimize identified risks which will include:										
5.1.	Infrastructure improvements, including creating "multiple lines of defense", "hard improvements" and "soft improvements" as previously discussed in "Understanding Goals of Risk Assessment" above.										
5.1.1.	Multiple Lines of Defense	1	3				0	4	\$680	\$680	
5.1.2.	Redundant Equipment	1	3				0	4	\$680	\$680	
5.1.3.	Alarm systems	1	3				0	4	\$680	\$680	
5.1.4.	Back-up equipment	1	3				0	4	\$680	\$680	

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	5.1.5. A monthly inspection of the pumps, generator and alarm system	1	3				0	4	\$680	\$680	
	5.1.6. A routine power shutdown to determine operation of the automatic generator and alarm system.	1	3				0	4	\$680	\$680	
	5.2. Recommendations for "hard" and "soft" improvements										
	5.2.1. Hard defenses										
	5.2.1.1. Engineered Safety Features	1	3			2	0	6	\$950	\$950	
	5.2.1.2. Physical barriers	1	3			2	0	6	\$950	\$950	
	5.2.1.3. Sensing devices	1	3			2	0	6	\$950	\$950	
	5.2.1.4. Warnings and alarms	1	3			2	0	6	\$950	\$950	
	5.2.2. Soft Defenses										
	5.2.2.1. Rules						0	0	\$0	\$0	
	5.2.2.2. Regulations						0	0	\$0	\$0	
	5.2.2.3. Procedures						0	0	\$0	\$0	
	5.2.2.4. Supervision						0	0	\$0	\$0	
	5.2.2.5. Sign off procedures						0	0	\$0	\$0	
	5.2.2.6. Permit to Work systems						0	0	\$0	\$0	
	5.3. Recommendations for repairs to existing system	1	8			6		15	\$2,315	\$2,315	
	5.4. Administrative Alternatives										
	5.4.1. Ordinances that identifying ownership of laterals						0	0	\$0	\$0	
	5.4.2. Ordinances that identify responsibilities for lateral cleaning						0	0	\$0	\$0	
	5.4.3. Construction requirements	1	2				0	3	\$515	\$515	
	5.5. Operational Alternatives										
	5.5.1. The use of a Geographic Information System	1	2			8	0	11	\$1,595	\$1,595	
	5.5.2. Availability of updated maps or plans for use field crew	1	2				0	3	\$515	\$515	
	5.5.3. Formal agency design criteria and construction specifications	1	2				0	3	\$515	\$515	
	5.5.4. Standard Operating Procedures , SOPs	1	2				0	3	\$515	\$515	
	5.10. Standard Maintenance Procedures, SMPs	1	2				0	3	\$515	\$515	
	5.6. Emergency Operation Procedures										
	5.6.1. Emergency or backup equipment	1	3				0	4	\$680	\$680	
	5.6.2. Emergency or backup power supply	1	3				0	4	\$680	\$680	
	5.7. Inspection Procedures										
	5.7.1. System identification in both field and in office	1	2				0	3	\$515	\$515	
	5.7.2. A Fats, Oils and Grease, FOG, program is in place	1	2				0	3	\$515	\$515	
	5.7.3. Problem areas have been identified and are receiving additional monitoring.	1	2				0	3	\$515	\$515	
	5.7.4. A method of infiltration or leakage identification is in place	1	2				0	3	\$515	\$515	
	5.7.5. Areas of vulnerable to root intrusion, age, settling etc have been identified and are monitored.	1	2				0	3	\$515	\$515	
	5.7.6. Availability of additional staffing during inclement weather	1	2				0	3	\$515	\$515	
	5.7.7. A root control program	1	2				0	3	\$515	\$515	
	5.7.8. Areas of excessive hydrogen sulfide corrosion have been identified and are controlled.	1	2				0	3	\$515	\$515	
	5.8. Emergency Response										
	5.8.1. Emergency procedures have been identified						0	0	\$0	\$0	
	5.8.2. Staff have been trained for emergency response	1	2				0	3	\$515	\$515	
	5.8.3. Emergency drills are regularly practiced	1	2				0	3	\$515	\$515	
	5.8.4. Emergency equipment is routinely tested and inspected	1	2				0	3	\$515	\$515	
	5.9. Staff Training										
	5.9.1. Necessary core competencies have been identified,	1	2				0	3	\$515	\$515	

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	5.9.2. A documented training and proficiency testing program for core competencies is in place,	1	2				0	3	\$515	\$515	
	5.9.3. Written SOPs and SMPs have been developed for core competencies.	1	2				0	3	\$515	\$515	
	5.10. Interceptor access and inspection plan with construction access road considerations. This will be based on available public domain or agency provided mapping.	1	1			4	0	6	\$890	\$890	
	5.11. An inflow monitoring plan at the treatment plant that correlates with various lake levels to confirm the integrity of the collection system.	1	2				0	3	\$515	\$515	\$24,340
	Task 6. Prepare a risk analysis of alternatives presented in Task 5 which will include:										
	6.1. A ranking of alternatives	1	6				0	7	\$1,175	\$1,175	
	6.2. An assessment of alternatives	1	6				0	7	\$1,175	\$1,175	
	6.3. Comprehensive details of the work performed						0	0	\$0	\$0	
	6.4. Recommendations for implementation of alternatives	1	4				0	5	\$845	\$845	
	6.5. Exhibits of the proposed alternatives	1	1			16	0	18	\$2,510	\$2,510	
	6.6. Supporting data and references as needed.	1	4			4	0	9	\$1,385	\$1,385	\$7,090
	SUBTOTAL PER STAFF TYPE	72	173	34	64	46	389		\$60,575		
		\$13,320	\$28,545	\$4,420	\$7,360	\$6,210	0		\$59,855	\$59,855	\$59,855